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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/718,825

11/21/2003

Donald Paul Richmond II

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WILSON SONSINI GOODRICH & ROSATI

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EXAMINER

VAZQUEZ, ARLEEN M

ART UNIT

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2829

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/718,825	Applicant(s) RICHMOND ET AL.	
	Examiner ARLEEN M. VAZQUEZ	Art Unit 2829	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09/24/2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 27-47 is/are pending in the application.
- 4a) Of the above claim(s) 41-47 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 27-38 and 40 is/are rejected.
- 7) ☒ Claim(s) 39 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>09/19/2008</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 09/24/2008 has been entered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 27 and 40 are rejected under 35 U.S.C. 102(b) as being anticipated by ***Dasse et al. (US 5,654,588)***.

For claims 27 and 40 having the phrase of “*configured to*”, applicant is reminded that claim scope is not limited by claim language that suggests or makes optional but does not require steps to be performed, or by claim language that does not limit a claim to a particular structure. The limitation of “configured to” is given patentably weight according to the doctrine of MPEP 2111.04.

As to claims 27 and 40, **Dasse et al.** discloses in Figure 13 a system configured for burn-in (250) comprising a temperature controlled zone (262) configured to receive a plurality of individually removable wafer cartridges (each cartridge comprises a test fixture 200n and a wafer 20n, the plurality of individually removable wafer cartridges are 200a and 20a, 200b and 20b, 200c and 20c) each containing a semiconductor wafer (20a-20c), each of the plurality of individually removable wafer cartridges including a probe power printed circuit board (200a-200c), power electronics (260) positioned in said cool zone (zone where 258 and 260 are located) adjacent to said temperature controlled zone (262), a first interconnection system (242a-242c and 252a-252c) connecting said power electronics (260) to said probe power printed circuit board (200a-200c), the first interconnection system including a plurality of connections (connectors 242a-242c and 252a-252c can manipulate each wafer cartridge individually) to separately receive the individually removable wafer cartridges, power lines (256) coupled to the wafer (20a-20c) and circuitry external to the wafers (258) that measures the power lines, the measuring comprising receiving voltage measurements or current measurements (Col. 17 lns 42-54).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Dasse et al. (US 5,654,588)** in view of **DeHaven et al. (US 5,701,666)**.

As to claims 28 and 29, **Dasse et al.** discloses everything above except for wherein the circuitry compares the measurements against a programmed limit, wherein if, according to the comparison, a measurement exceeds the limit, the circuitry shuts off power only to a respective power line that has a measurement exceeding the limit. However, **DeHaven et al.** discloses in Figures 5-7 wherein the circuitry (54,56,58,60) compares the measurements against a programmed limit (VREF or IREF) and wherein if, according to the comparison, a measurement exceeds the limit, the circuitry shuts off power only to the respective power line that has a measurement exceeding the limit (Col. 8 ln 66- Col. 9 ln 15).

It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify **Dasse et al.** teachings by having measurements compared against programmed limits as taught as **DeHaven et al.** to avoid damage to the device and to assure high quality of the device.

6. Claims 30-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Dasse et al. (US 5,654,588)** in view of **DeHaven et al. (US 5,701,666)** further in view of **Chong, Jr. et al. (US 6,377,471)**

As to claims 30-33 and 37, the combination of **Dasse et al. and DeHaven et al.** discloses everything above but fails to teach a probe signal printed circuit board being rigid, flexible or substantially parallel to and closely spaced from the probe power

Art Unit: 2829

printed circuit board. However, **Chong, Jr. et al.** discloses in Figures 6A-6B a probe signal printed circuit board (606) being rigid (is rigid enough to support other components on its surface), flexible (printed circuit boards are made of materials that have certain degree of flexibility) and is substantially parallel to and closely spaced (as shown in Figures 6A-6B) from the probe power printed circuit board (602).

It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the combined teachings of **Dasse et al. and DeHaven et al.** by having a probe signal pcb parallel and spaced from probe power pcb as taught as **Chong, Jr. et al.** to avoid direct electrical contact between them but having them close enough to connect both to same components on the system.

As to claims 34-36, **Dasse et al.** discloses in Figure 13 test and bur-in electronics (inside 258, Col. 17 ln 42- Col. 18 ln 24) positioned in said cool zone (zone where 258 and 260 are located) adjacent to said temperature controlled zone (262). The combination of **Dasse et al. and DeHaven et al.** discloses everything above except for a second interconnection system connecting said electronics to said probe signal printed circuit board. However, **Chong, Jr. et al.** discloses in Figures 6A-6B a second interconnection system (610,612) connecting said electronics (614) to said probe signal printed circuit board (606).

It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the combined teachings of **Dasse et al. and DeHaven et al.** by having a second interconnection system connecting said electronics and the

Art Unit: 2829

probe signal pcb as taught as **Chong, Jr. et al.** to allow the electronics make connection between the probe signal pcb and the rest of the components of the system different from the connection of the probe power pcb.

As to claim 38, **Dasse et al.** discloses in Figure 13 a transition zone (zone between cool zone 258,260 and controlled zone 262 comprising power lines 256) separating temperature controlled zone (262) and cool zone (258 and 260).

Allowable Subject Matter

7. Claim 39 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

8. Applicant's arguments with respect to claims 27-38 and 40 have been considered but are moot in view of the new ground(s) of rejection.

Prior Art

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Gunn et al. US 7,063,544 and LeBlanc US 5,954,832.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ARLEEN M. VAZQUEZ whose telephone number is (571)272-2619. The examiner can normally be reached on Monday to Friday, 7am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ha Nguyen can be reached on 571-272-1678. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. M. V./
Examiner, Art Unit 2829
11/06/2008

***/Ha T. Nguyen/
Supervisory Patent Examiner, Art Unit 2829***